

In the claims:

Cancel claim 12, amend claims 1 through 9 and 11, and add claim 15, as follows:

D^{1E}
E

1. (Thrice Amended) A method of sealing a multilayer polymer film including two or more layers, which, at a first sealing temperature, forms a peelable bond and, at a second higher sealing temperature, forms a permanent bond, [characterized in that] wherein the sealing layer has a matrix phase polymer system, ^{wherein} ~~whereby~~ the matrix polymer is a polyethylene homopolymer, a polyethylene copolymer, a polypropylene homopolymer, or a polypropylene copolymer and the phase polymer is a styrene ethylene/butylene styrene triblock polymer with a styrene ethylene/butylene diblock component, a styrene ethylene/propylene styrene triblock polymer, a styrene butadiene styrene triblock polymer, and/or a styrene isoprene styrene triblock polymer, which method comprises forming a seam which can be separated by a force in the range of 5 to 20 N/mm² by sealing the film ^{at} ~~with~~ a temperature in the range of from 123 °C to 128 °C.

D²

2. (Amended) The method [the multilayer film] according to Claim 1, characterized in that the multilayer film is a co-extruded multilayer film.

D³

3. (Twice Amended) The method [the multilayer film] according to Claim 1, characterized in that the multilayer film has two to seven layers.

D⁴

4. (Thrice Amended) The method [the multilayer film] according to Claim 1, characterized in that the phase polymer contains a processing aid.

D⁵

5. (Twice Amended) The method [the multilayer film] according to Claim 1, characterized in that the proportion of the phase polymer is in the range from 1 to 40 wt.[-]%, based on the matrix-phase polymer system.

D⁶

6. (Twice Amended) The method [the multilayer film] according to Claim 1, characterized in that the multilayer film has a gas barrier for oxygen and carbon dioxide as well as a water vapor barrier layer.

7. (Twice Amended) A multichamber medical bag (1) made of a polymer material for preparation of medical mixed solutions, which has at least two chambers (8 and 9), which are separated from each other by a sealed separation zone (7) to be opened and are sealed in ^{an} ~~the~~ outer border zone (2, 3), whereby in the seam of the outer border zone at least one tube (4) is provided in at least one chamber, characterized in that ^{it is} ~~its~~ fabricated from a multilayer polymer film [according to Claim 1, 2, 3, 4, 5 or 6] including two or more layers, which, at a first sealing temperature, forms a peelable bond and, at a second higher sealing temperature, forms a permanent bond, wherein ~~in~~ the sealing layer has a matrix phase polymer system, ^{wherein} ~~whereby~~ the matrix polymer is a polyethylene homopolymer, a polyethylene copolymer, a polypropylene homopolymer, or a polypropylene copolymer and the phase polymer is a styrene ethylene/butylene styrene triblock polymer with a styrene ethylene/butylene diblock component, a styrene ethylene/propylene styrene triblock polymer, a styrene butadiene styrene triblock polymer, and/or a styrene isoprene styrene triblock polymer.

8. (Amended) The multichamber bag according to Claim 7, characterized in that the seam is separable in the separation zone (7) with a force which is in the range from 5 to 20 [N] N/mm² and the seam in the outer border zone (2, 3) is inseparable.

9. (Thrice Amended) The multichamber bag according to Claim 7 [or 8], characterized in that it is heat sterilizable.

11. (Twice Amended) The multichamber bag according to Claim 7 [1, 2, 3, 4, 5, 6, 7, 8, 9 or 10], characterized in that the outer wall in the chamber separation zone is provided with at least one tear tab (10).

^{14 add}
15. A method for preparing a mixed solution for dialysis, infusion, or nutrition, characterized by separating a seam between at least two chambers (8 and 9) of a multichamber medical bag of claim 7.

well as at least one seal having easy-to-peel openability. The polymer film used for heat sealing is a multilayer blown film having as an inner layer a mixture of linear low density polyethylene and polypropylene in specified proportions. Amended claim 1 no longer claims ethylene- α olefin-copolymer as a phase polymer. The phase polymer of claim 1 is a styrene ethylene/butylene styrene triblock polymer with a styrene ethylene butylene diblock component, a styrene ethylene/propylene styrene triblock polymer, a styrene butadiene styrene triblock polymer, and/or a styrene isoprene styrene triblock polymer. The cited document does not disclose any of these copolymers. Claim 1 is therefore patentable of cited EP '774.

Compared to such an ethylene/propylene copolymer, the phase polymers as claimed in amended claim 1 of the present invention have several advantages. A synthetic rubber as, for example, styrene ethylene butylene styrene triblock polymer is cross-linked in all three dimensions, resulting in an improved heat stability that permits sterilization by heat. Ethylene/propylene copolymers are poor in heat sterilization, because this layer tends to stick together.

Additionally, ethylene/propylene copolymers are showing elasticities at room temperature that are inferior when compared with the phase polymers claimed in claim 1 resulting in impaired flex resistance and impact resistance.

The medical bag according to the present invention is novel as well as inventive over the cited art.

Referring to item 11 of the Office Action applicants do not believe claim 6 is unpatentable in view of EP '774 and EP 0 513 364 (EP '364). Claim 6 is dependent from claim 1 and claim 1 is patentable over the cited art as discussed above. Claim 6 is novel as well as inventive over the cited art.

The Examiner's arguments in view of EP 0 380 145 (EP '145) are not

understood. It is true that EP '145 discloses the same material as claimed in the present invention but EP '145 is clearly directed to a bag having seals that do not open under load or during sterilization. Additionally, the peelable seal itself cannot be said to be known only from the material itself, since the properties of the seal are defined by the welding processes and are not due only to the materials. From applicants' point of view EP '145 gives no hint to using the material as disclosed to get a peelable seal. In contrast thereto, in view of the cited art in this European patent application, it was the goal of the invention to get a seal that does not open. The EP '145 application gives neither a hint nor an idea of how to get a peelable seal by using different welding temperatures. Since the cited EP '145 deals with seals having improved stability, applicants believe the cited art points in the opposite direction.

In view of the amendments to the claims and the foregoing remarks, applicants believe that the claims are in condition for allowance and respectfully solicits a Notice of Allowance.

Please note that a change of address was filed on November 26, 1997. Please direct correspondence to us at that address which is also shown on page 1 of this amendment.

Respectfully submitted,



Robert Berliner
Registration No. 20,121

(213) 892-9237